

REMARKS

This responds to the Final Office Action mailed on November 24, 2009. Reconsideration is respectfully requested.

Claims 5, 7, 16 and 23 are amended, no claims are canceled, and no claims are added; as a result, claims 1 – 24, 26 and 27 are now pending in this application.

Allowable Subject Matter

Claims 2, 12-13, 18-21 and 26-27 are allowed.

Claim 16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action. As discussed below, claim 16 has been amended to overcome the rejection under 35 U.S.C. 112". Accordingly, claim 16 is believed to be in condition for allowance.

Claims 17-24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 second paragraph, set forth in this Office action and to include all of the limitation of the base claim and any intervening claims. As discussed below, claim 16 has been amended to overcome the rejection under 35 U.S.C. 112". Accordingly, claims 17 – 24 are believed to be in condition for allowance.

Claims 5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 5 and 7 have been rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, claims 5 and 7 are believed to be in condition for allowance.

The Rejection of Claims Under § 112

Claims 16-24 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting an essential step, such omission amounting to a gap between the steps. Claim 16 has been amended to recite "performing an analog to digital conversion on the accumulated signal

information from the plurality of subchannels to generate digital signals". Accordingly the rejection of claims 16 - 24 is believed to be overcome.

The Rejection of Claims Under § 103

Claims 1, 3, 4, 6, 8-11, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tu et al. (U.S. 2005/0144650) in view of Shah (U.S. 6,173,164).

Tu has been cited for disclosing, among other things, "a subchannel filter selection switch to provide an analog baseband signal to a selected one of the subchannel low-pass filters". According to the Examiner, in FIG. 4A and paragraph 44 of Tu, mixers provide IF1 signal to a selected LPF 438-1A. Applicant respectfully disagrees with this and submits that each mixer 432 provides an output to only one filter. There is no switch in Tu to provide a mixer output to a selected filter of several possible filters (see Tu FIG. 4A). For example, output of mixer 432-1A is provided directly to filter 438-1A and the output of mixer 432-2A is provided directly to filter 435-2A (see Tu FIG. 4A). There is no filter selection.

According to Tu "Using the output frequencies of frequency synthesizers 428, mixers 432 produce up to eight independent desired channels with the channel center frequencies positioned at two different intermediate frequencies, EF1 and IF2 (only local oscillator frequencies LO1,1 and LO1,2, and mixers 432-1A and 432-1B are shown). Similar processing occurs for the other tuned channels, but the details are omitted from the drawing for clarity." (See Tu paragraph [0044]). Each mixer in Tu thus provides an output of a different frequency channel. Therefore, there would be no reason to switch the outputs of the mixers to different filters to select different channels.

Accordingly, the combination of Tu and Shah does not result in Applicant's claims 1, 3, 4, 6, 8-11, and 14-15.

Claims 16-17 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tu et al. and Shah in view of Schaefer et al. (U.S. 7,293,101).

The Examiner has stated that claim 16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action. Claim 16 has been amended to overcome the rejection(s) under 35 U.S.C. 112 and is therefore

believed to be in condition for allowance. Claim 17 is believed to be allowable at least because of its dependency on claim 16.

As discussed above, Tu does not show “a subchannel filter selection switch to provide an analog baseband signal to a selected one of the subchannel low-pass filters”. Accordingly Tu’s system cannot perform “providing an analog baseband signal to a selected one of a plurality of subchannel low-pass filters during the filter-input sampling interval” as recited in claim 16. Therefore claim 16 is believed to be allowable over the combination of Tu, Shah and Schaefer. Claims 17 and 22-23 are believed to be allowable at least because of their dependency on claim 16.

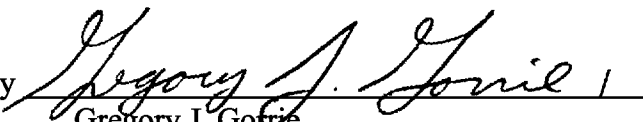
CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant’s representative at (480) 659-3314 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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